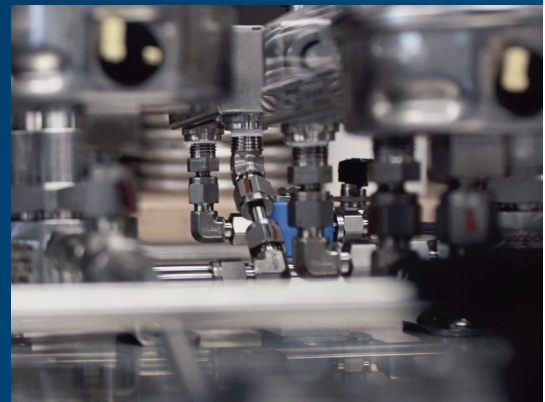


SWAGELOK[®] CUSTOM SOLUTIONS

PROVIDED BY SWAGELOK CLEVELAND | COLUMBUS | CHARLESTON



UNIQUE CHALLENGES REQUIRE THE RIGHT SOLUTIONS

You need a solution uniquely tailored to your needs, and you need it now. You could spend your resources on designing, sourcing, building, and testing a solution. Or you could take advantage of Swagelok's expertise as an integrated supplier of more than just products. We provide local support, backed by a global presence, from initial concept to assembly.

WE CAN HELP

ENHANCE YOUR CAPABILITIES

MULTIPLY YOUR RESOURCES

EXTEND YOUR WORKING CAPITAL

IMPROVE RESPONSE TIMES

IMPROVE SAFETY



ENHANCE CAPABILITIES. MULTIPLY RESOURCES. EXTEND WORKING CAPITAL.

IMPROVE RESPONSE TIMES AND SAFETY.



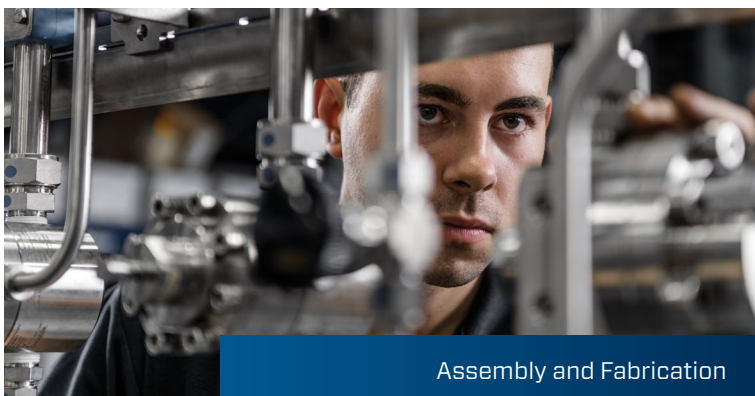
Design

When resources are limited, take advantage of Swagelok's capabilities for a complete turnkey solution.

DESIGN

Whether your idea is just that—an idea, or a sketch on a napkin, or even the result of a conversation—we can enhance it with 3D drawings compatible with your engineering drawing system, including:

- Analytical and process instrumentation systems
- Medium- and high-pressure applications



Assembly and Fabrication

FABRICATION

You know what you want to do—now you need to know how to do it quickly. Let Swagelok provide and assemble components to meet your exact requirements.

- High-volume tube bending and swaging
- Orbital Welding
- Custom hose cutting and end connection selection

ASSEMBLY

Start with some of our most widely known products: valves, regulators, and manifolds. Add the expertise required to put together the componentry into a solution you can use. The results? Custom component, assembly, and enclosure fabrication, including:

- Regulator panels
- Oxygen-safe assemblies
- Changeover manifolds
- Lube oil skids

STOCKING AND KITTING PROGRAMS

Take advantage of Swagelok's Vendor Managed Inventory to help you maintain the right stocking levels on critical components.



Stocking and Kitting Programs

What else can we do to help you when you're up against a deadline, and you want to be sure your solution meets and exceeds safety standards?

QUALITY-CERTIFIED PRODUCTS

For starters, we can assure the parts you receive from us are of the finest quality. Upon request, we can provide the following certification information:

- Typical mechanical and chemical properties certificates of compliance
- Nuclear Certificates of Compliance (fitting only)
- Traceable Certified Material Test Reports (CMTR)
- Nuclear Traceable CMTRs
- Certificates of Origin

CLEANING AND PACKAGING

Swagelok's cleaning and packaging requirements ensure our products meet or exceed cleanliness standards appropriate to your industry.

FACTORY-CERTIFIED ASSEMBLY TRAINING

Assembly services by our Custom Solutions personnel are backed by Swagelok-administered certified training.

LIMITED LIFETIME WARRANTY

Like everything else we provide, our custom solutions services are backed by our Limited Lifetime Warranty.



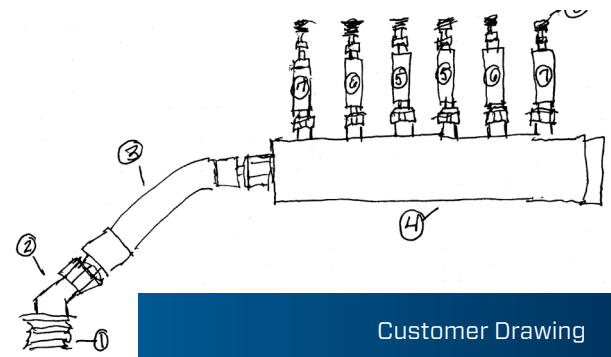
Cleaning and Packaging



Factory Certified Training

START TO FINISH PROCESS

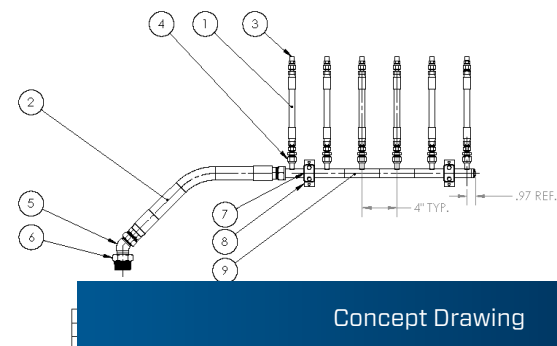
SIMPLE AND COMPLEX SOLUTIONS



Customer Drawing



CAD model



Concept Drawing



Finished Assembly

CAD CAPABILITIES

Swagelok uses 3D solid modeling software and can create or edit CAD drawings to assist you in the design of your fluid system. To the left you can see the process we take when creating custom assemblies for our customers.

OUR PROCESS

STEP 1- YOUR CONCEPT:

Email, fax, or mail a simple drawing with assembly specifications. Or call us with your concept and specifications -we'll take it from there.

STEP 2- CLEAR COMMUNICATION

We communicate with you to ensure that all of your questions are answered before our drawings and technical quotations are produced.

STEP 3- CAD DRAWING AND QUOTES

We provide a CAD drawing of your assembly, a technical quotation, firm pricing, and delivery information.

STEP 4- ASSEMBLY

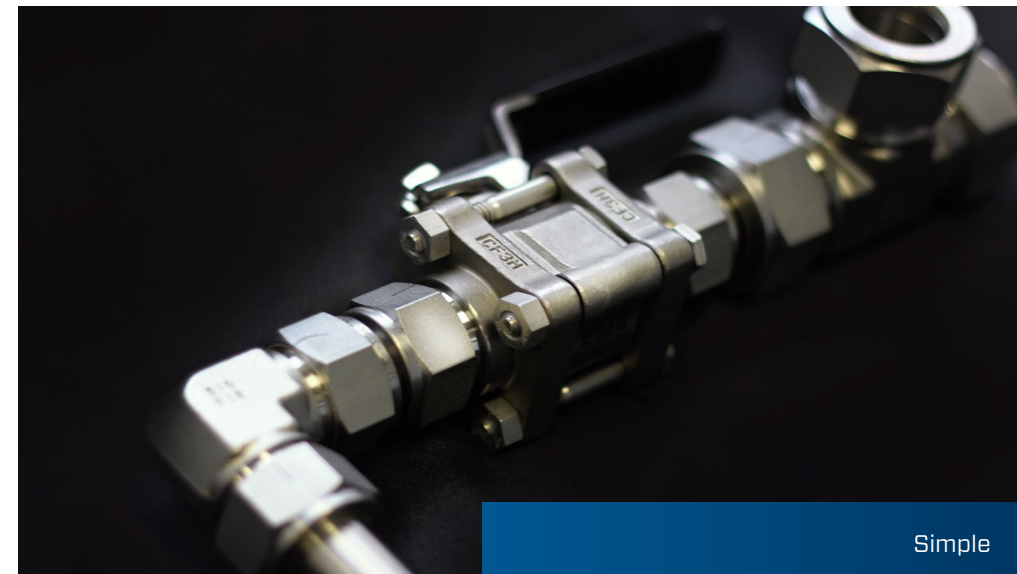
Next, we gather the necessary parts. Assembly takes place in a clean and well-equipped assembly area or clean room per your application.

STEP 5- QA AND TESTING

Your new assembly goes through thorough QA and testing processes before it is shipped to you. Snoop®, pressure decay, hydrostatic, and helium leak testing are available.

STEP 6- DELIVERY

We manage the inspection, packaging, and delivery. All custom assemblies are delivered with supporting documentation and our limited lifetime warranty.



Simple



Complex

SIMPLE SOLUTIONS

Our custom assemblies come in a variety of sizes and come from an assortment of Swagelok products. To the left is an example of a simple solution our custom solutions team has assembled. Pictured is a sub assembly. Refineries, power, or chemical plants can stock these simple assemblies that will be used as a part by their technicians instead of getting a handful of loose parts that have to be assembled in the field. That way they can install in a system with just two connections instead of multiple.

BENEFITS:

REDUCE COST- choosing to out source your fabrication needs minimizes your planning, assembly, and purchasing costs.
SAVE TIME- providing a single source solution
QUALITY- offering the highest quality product and assembled by detail oriented associates.
CERTIFICATION- using Swagelok certified associates, we are able to properly assemble your system

COMPLEX SOLUTIONS

Our custom assemblies can also be larger in size such as the example provided here. Pictured is a chlorine distribution cabinet for an aluminum fabrication plant. Other similar complex assemblies could be analyzer conditioning or stream selection cabinets.

From project start to completion, Swagelok ensures your operation's unique requirements are seamlessly met through partnership between Swagelok Columbus|Charleston and the Swagelok Global Technology Centers.

WE'RE GLOBAL. AND LOCAL.

SWAGELOK CLEVELAND | COLUMBUS | CHARLESTON

From our Sales and Service Centers in Cleveland, Columbus and Charleston we can provide you with a wide variety of service solutions. Our quality, superior performance and reliability will reduce your costs in designing, sourcing and assembling components. To take advantage of Swagelok's Custom Solutions offerings, please contact your authorized sales and service center

Swagelok Cleveland

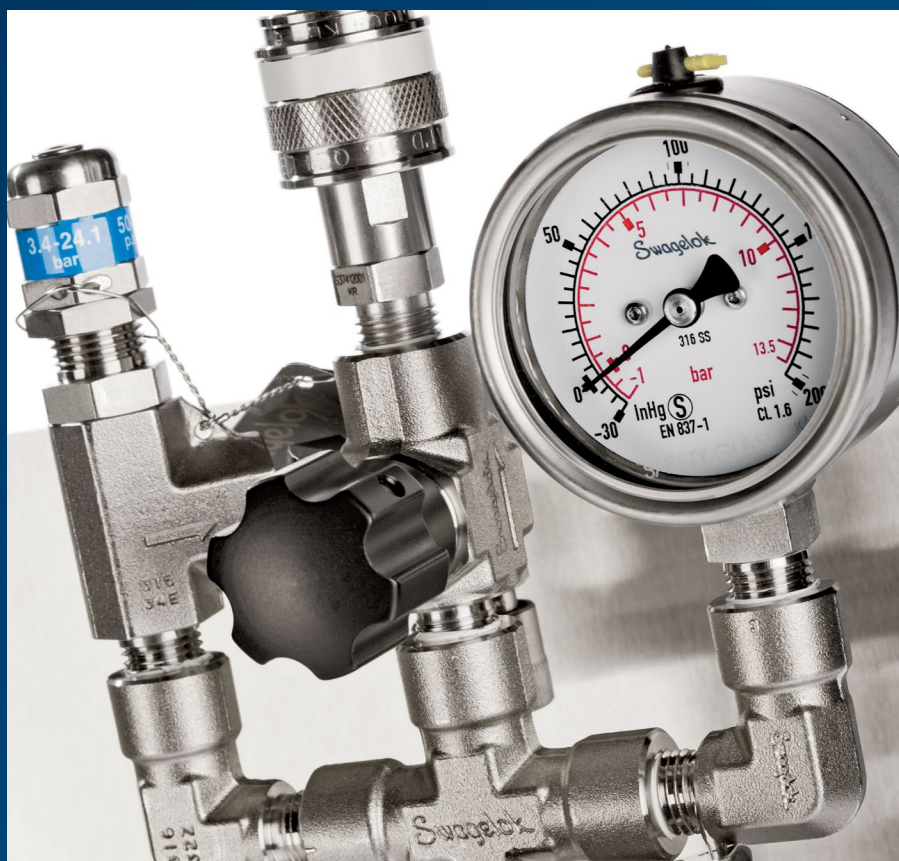
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All Custom Solutions offerings are developed in accordance within the guidelines of Swagelok's ISO-based quality system to ensure quality, safety, and reliability. These guidelines enable us to distribute Swagelok-approved fluid system components and fabricate and install piping systems in accordance with ASME B31.1 and B31.3. Our Custom Solutions assemblies carry the Swagelok Limited Lifetime Warranty. For a copy, visit www.swagelok.com or contact your local authorized sales and Service Center.

